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PREFILED STAFF TESTIMONY

VIRGINIA NATURAL GAS, INC.

**For a general increase in rates and for
authority to revise the terms and conditions
applicable to natural gas service**

Volume I of III

Case No. PUE-2016-00143

August 29, 2017

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PART A

**PREFILED TESTIMONY
OF
ESTAÑA M. DAVIS
VIRGINIA NATURAL GAS, INC.
CASE NO. PUE-2016-00143
AUGUST 29, 2017**

Summary of Testimony

1 My testimony includes the following findings and recommendations:

2 1. Staff recommends that the Commission find Staff's proposed adjustments to the Rate
3 Year Analysis reasonable and authorize a total non-gas, base rate revenue increase of
4 \$25.77 million to provide VNG the opportunity to earn a return on equity ("ROE") at the
5 8.75% mid-point of Staff witness Gereaux's ROE range. This increase includes an
6 incremental increase of approximately \$12.36 million above the rates already charged to
7 customers for SAVE.

8 2. Staff makes various recommendations as a result of its recent quarterly billing factor
9 audit.

**PREFILED TESTIMONY
OF
ESTAÑA M. DAVIS**

**VIRGINIA NATURAL GAS, INC.
CASE NO. PUE-2016-00143
AUGUST 29, 2017**

INTRODUCTION

**Q1. PLEASE STATE YOUR NAME AND THE POSITION YOU HOLD WITH THE
STATE CORPORATION COMMISSION ("COMMISSION").**

A1. My name is Estaña M. Davis. I am a Principal Utility Accountant with the Commission's
Division of Utility Accounting and Finance.

**Q2. PLEASE PROVIDE A BRIEF DESCRIPTION OF VIRGINIA NATURAL GAS,
INC.**

A2. Virginia Natural Gas, Inc. ("VNG" or the "Company") is a Virginia public service
company that provides natural gas service to approximately 293,000 residential,
commercial, and industrial customers located in Norfolk, Virginia Beach, Chesapeake,
Suffolk, Hampton, Newport News, Poquoson, York, James City, Williamsburg, New
Kent, Charles City, King William, and Hanover. VNG is a wholly-owned subsidiary of
Southern Company Gas ("GAS"), which is a wholly-owned subsidiary of The Southern
Company ("Southern").¹

Q3. PLEASE SUMMARIZE VNG'S MOST RECENT GENERAL RATE CASE.

¹ AGL Resources, Inc. ("AGLR") was renamed GAS after the merger between Southern and AGLR closed on July 1, 2016. The Commission approved this merger in its Final Order in Case No. PUE-2015-00113.

A3. On February 8, 2011, the Company filed an application with the Commission, docketed as Case No. PUE-2010-00142, pursuant to Chapter 10 of Title 56 of the Code of Virginia ("Code") requesting authority to increase its base rates by a total of \$28.4 million, effective August 1, 2011, and to revise the Company's terms and conditions applicable to natural gas service ("2011 Rate Case"). On December 20, 2011, the Commission entered a Final Order adopting a stipulation and granting the Company a total increase in base rate revenue of \$11.3 million based on a return on equity ("ROE") of 10%.²

Q4. PLEASE SUMMARIZE THE CURRENT APPLICATION.

A4. On March 31, 2017, the Company filed an application with the Commission pursuant to Chapter 10 of Title 56 of the Code and the Commission's Rules Governing Utility Rate Applications and Annual Informational Filings, 20 VAC 5-201-10 *et seq.*, for authority to increase rates and charges, effective September 1, 2017, and to revise other terms and conditions applicable to its gas service ("Application").

In its Application, the Company requests an increase in annual non-gas base rate revenue of \$44.1 million based on the Company's fully-adjusted cost of service ("Rate Year Analysis") for the twelve months ending August 31, 2018 ("Rate Year"). This increase includes \$13.4 million currently being collected by the Company outside of base rates in a surcharge associated with its Steps to Advance Virginia's Energy plan ("SAVE plan") pursuant to Code § 56-603 *et seq.* The Company also requests that the Commission approve a 10.25% ROE.

² *Application of Virginia Natural Gas, Inc., For an increase in base rates and for authority to revise the terms and conditions applicable to natural gas service pursuant to Chapter 10 (§ 56-232 et seq.) of Title 56 of the Code of Virginia*, Case No. PUE-2010-00142, 2011 S.C.C. Ann. Rept. 407, Final Order (Dec. 20, 2011).

1 **Q5. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

2 **A5.** My testimony addresses the following:

- 3 1) The results of Staff's review of the Company's Rate Year Analysis and Staff's
4 recommended non-gas base rate increase;
- 5 2) Staff's adjustments to revenue, operation and maintenance ("O&M") expenses,
6 income tax expense, and service company charges; and
- 7 3) The results of Staff's Purchased Gas Adjustment ("PGA") audit and its audit
8 of the sales and use tax surcharge.

9 **Q6. PLEASE IDENTIFY OTHER STAFF WITNESSES PRESENTING TESTIMONY**
10 **IN THIS PROCEEDING.**

11 **A6.** There are six other Staff witnesses filing testimony in this proceeding.

12 Bryant K. Wong addresses:

- 13 1) Staff's rate base forecast and adjustments to depreciation expense and property
14 tax expense;
- 15 2) The roll-in of SAVE investment into base rates;
- 16 3) Staff's lead/lag study; and
- 17 4) The results of Staff's review of the depreciation study.

18 Michele G. Grant addresses:

- 19 1) The Company's jurisdictional separation study and class cost of service
20 studies; and
- 21 2) The Company's proposed revenue apportionment, rate design, miscellaneous
22 charges, and tariff revisions.

23 Brian S. Pratt addresses the Company's gas line extension policy. Phillip M. Gereaux
24 addresses the ROE proposed by Staff in the Rate Year Analysis. Lawrence T. Oliver

addresses the capital structure proposed by Staff in the Rate Year Analysis. Andrew J. Eaken addresses the Company's proposed Rate Schedule 1A.

Q7. PLEASE IDENTIFY THE EXHIBITS ACCOMPANYING YOUR TESTIMONY.

A7. The following exhibits support my testimony:

- Statement I – Rate of Return Statement – Per Books
- Statement II – Rate of Return Statement – Adjusted
- Statement III – Rate Base Statement – Per Books
- Statement IV – Rate Base Statement – Adjusted
- Schedule A – Summary of Company and Staff Adjustments
- Statement V – Cash Working Capital Allowance – Lead/Lag Study
- Statement VI – Cash Working Capital Allowance – Balance Sheet Analysis
- Statement VII – Schedule of Rate Year Revenue Requirements
- Statement VIII – Reconciliation between Company and Staff Revenue Requirements
- Appendix A – Workpapers Supporting Staff's Adjustments
- Appendix B – Additional Supporting Documentation

RATE YEAR ANALYSIS

Q8. WHAT IS THE PURPOSE OF THE RATE YEAR ANALYSIS?

A8. The Rate Year Analysis evaluates the need for an increase or decrease in the rates a utility charges its customers. The analysis begins with per books cost of service for the twelve months ended September 30, 2016 ("Test Year"), which is then adjusted to reflect

revenue, expense, and rate base changes that can be reasonably predicted to occur during the Rate Year.

Q9. HAS STAFF REVIEWED THE COMPANY'S RATE YEAR ANALYSIS AND PREPARED ITS OWN ANALYSIS?

A9. Yes, it has. After incorporating all of Staff's recommended ratemaking adjustments, Staff's Rate Year Analysis results in a Rate Year ROE of 6.56%. Therefore, based on a recommended ROE of 8.75%, as supported by Staff witness Gereaux, Staff's analysis results in a total required increase in Virginia jurisdictional non-gas, base rate revenue of \$25.77 million. This increase includes an incremental increase of approximately \$12.36 million above the rates already charged to customers for SAVE. Below is a table reconciling Staff's and the Company's proposed incremental revenue increase:

Table 1

Reconciliation between Staff and the Company Revenue Increase

Company Proposed Incremental Revenue Requirement Increase	\$30,702,015
Staff's Proposed Capital Structure	\$96,502
Staff's Proposed Return on Equity	(\$8,460,953)
Operating Revenues	\$2,185,234
Operating Revenue Deductions	(\$8,774,908)
Rate Base	(\$3,384,368)
Other Miscellaneous Differences	<u>\$76</u>
Staff Proposed Incremental Revenue Requirement Increase	<u>\$12,363,598</u>

1 A discussion of Staff's ratemaking adjustments to operating revenue, O&M
2 expense, and income tax expense follows. Other ratemaking adjustments are discussed
3 by Staff witness Wong.

4 RATEMAKING ADJUSTMENTS

5 *Operating Revenue*

6 **Q10. PLEASE DISCUSS STAFF'S PRESENTATION OF REVENUE IN THE RATE OF**
7 **RETURN STATEMENT.**

8 **A10.** Staff shows the SAVE revenue split between the Annual SAVE Factor ("ASF") and the
9 SAVE Actual Cost Adjustment ("SACA"). Staff presents revenue in this way to illustrate
10 the roll-in of the SAVE ASF into base rates. Column 6 of my Statement II shows the
11 incremental revenue requirement increase above the ASF revenue of approximately
12 \$12.36 million.

13 **Q11. PLEASE DISCUSS COMPANY ADJUSTMENT NO. 1 TO ADJUST BASE RATE**
14 **REVENUE TO THE RATE YEAR.**

15 **A11.** The purpose of this adjustment is to calculate Rate Year non-gas, base rate revenue at
16 current rates based on Rate Year customer bills and weather normalized volumes. The
17 Company's adjustment begins with Test Year, per book revenue and removes unbilled
18 revenue and revenue associated with the revenue normalization adjustment ("RNA") and
19 the weather normalization adjustment ("WNA") tariffs. VNG then normalizes the Test
20 Year consumption for weather and conservation and adjusts for Test Year growth.³ After

³ VNG's proposed weather normalization methodology incorporates projected conservation.

removing non-jurisdictional revenue and gas revenue, VNG adjusts for Rate Year customer growth and removes SAVE revenue. The Company's non-gas, base rate revenue adjustment increases jurisdictional revenue by \$12,576,954.

Q12. HOW DOES STAFF ADJUSTMENT NO. 1 DIFFER FROM COMPANY ADJUSTMENT NO. 1?

A12. Staff's adjustment to base rate revenue similarly begins with Test Year, per book revenue and removes unbilled revenue and revenue associated with the RNA and WNA. Staff also removes gas revenue and non-jurisdictional revenue. Staff's adjustment differs from the Company's adjustment due to: 1) the Test Year weather normalized usage and 2) the Rate Year forecasted usage. Staff's adjustment increases jurisdictional base rate, non-gas revenue by \$15,306,358, which is \$2,729,404 higher than the Company's adjustment.

Q13. PLEASE FURTHER EXPLAIN THESE DIFFERENCES IN CUSTOMER USAGE.

A13. First, Staff proposes to use the regression method used by Staff in the 2011 Rate Case to calculate the weather sensitive usage of VNG's residential and commercial customers. Staff believes its method is appropriate because it produces replicable and verifiable results, is consistent with the regression models used by other gas utilities in Virginia,⁴ and is consistent with the model used by VNG itself in its tariffed WNA mechanism.

⁴ The other Virginia natural gas companies that use this regression model include Roanoke Gas Company, Atmos Energy Corporation, Southwestern Virginia Gas Company, and Appalachian Natural Gas Distribution Company. Washington Gas Light Company also uses a linear regression model, in contrast with VNG.

1 The determination of weather sensitive usage from this regression model is used to
 2 weather normalize the Company's Test Year billing determinants. The Company
 3 proposes to use an alternative regression model that is more complex than the simple
 4 linear regression model that Staff proposes to use and is inconsistent with the method
 5 used in the Company's tariffed WNA mechanism.

6 Second, Staff proposes to use this normalized usage for the Rate Year growth
 7 adjustment rather than the Company's proposed forecasted usage to be consistent with
 8 Staff's position on the simple linear regression method. The Company uses its alternative
 9 regression model to forecast Rate Year usage.

10 **Q14. PLEASE DISCUSS THE ADJUSTMENTS TO RIDER REVENUE.**

11 **A14.** Since the Rate Year Analysis focuses on the base rate cost of service, any impact from
 12 non-base rate items should be eliminated. The Company currently has several different
 13 non-base rate mechanisms that allow it to recover eligible costs through riders. These
 14 riders include the recovery of purchased gas costs through a quarterly billing factor
 15 ("QBF"), the SAVE rider, the Conservation and Ratemaking Efficiency Program
 16 ("CARE") rider, the WNA, and the RNA. Company Adjustment No. 2 adjusts gas
 17 revenue to a Rate Year level and Company Adjustment No. 9 equalizes gas costs to Rate
 18 Year gas revenue to eliminate the effect on base rates. Company Adjustment No. 4
 19 annualizes SAVE revenue using Rate Year billing determinants and current SAVE rates.
 20 Company Adjustment No. 5 eliminates CARE and RNA revenue, and Company

Adjustment No. 8 eliminates carrying costs on gas storage.⁵ Staff agrees that these adjustments are appropriate; however, Staff's adjustments to gas revenue differ from the Company's because of the difference in billing determinants discussed above.

Uncollectible Expense

Q15. PLEASE DISCUSS STAFF ADJUSTMENT NO. 11 AND COMPANY ADJUSTMENT NO. 11 TO UNCOLLECTIBLE EXPENSE.

A15. To calculate the Rate Year level of uncollectible expense, the Company uses a weighted average net charge-off rate for the three years ended September 30, 2016, and applies that rate to the adjusted non-gas operating revenue. Staff uses the same methodology for its uncollectible adjustment. The only difference between Staff's and the Company's adjustment is caused by the difference in the adjusted operating revenue. Staff's adjustment increases jurisdictional expense by \$63,913, which is \$2,888 more than the Company's adjustment.⁶

Payroll and Benefits Expense

Q16. PLEASE DISCUSS COMPANY ADJUSTMENT NOS. 10 AND 19 TO PAYROLL EXPENSE.

A16. In Company Adjustment No. 10, VNG proposes to adjust payroll expense to a Rate Year level based on employee levels and pay as of November 1, 2016 plus three percent merit

⁵ Staff also proposes Adjustment No. 21 to eliminate CARE expense to remove all effects of this rider on the base rate cost of service.

⁶ The Company included account 650701 Uncollectible Accounts – Damages in its Adjustment No. 11. The Company used the same methodology to estimate a Rate Year amount for this account as it did for the other O&M expenses, which is discussed later in my testimony. This account is removed here for purposes of comparison.

increases for 2017 and 2018. VNG's rate year payroll also adds payroll for any vacant and newly-created positions.⁷ The Company also includes variable compensation, which includes its short-term and long-term incentive plans. The Company's estimated Rate Year level of variable compensation is based on the 2017 budget plus a general three percent increase for 2018. The Company removed capitalized payroll associated with payroll directly coded to capital projects. VNG's Rate Year level of capitalized payroll is based on the percentage of capitalized base pay and overtime from the prior year.

The Company proposes a separate adjustment for capitalized administrative and general ("A&G") payroll in Company Adjustment No. 19. The Rate Year level of A&G capitalized payroll is based on Test Year amounts in accounts 670150 – A&G Salaries Capitalized and 670160 – A&G Expenses Capitalized, and increased by the percentage increase from Company Adjustment No. 10. VNG's net payroll adjustment increases jurisdictional expense by \$941,037.⁸

Q17. PLEASE DISCUSS STAFF ADJUSTMENT NO. 10 TO PAYROLL EXPENSE.

A17. Staff's proposed Rate Year level of payroll expense is based on annualized actual base salaries as of the last pay period in April 2017 plus the Rate Year effect of expected increases,⁹ vacant positions expected to be filled before the end of the Rate Year, and estimated overtime and variable compensation. Staff's Rate Year level of overtime pay

⁷ See the Company's Response to Staff Informal Data Request No. 8-133 in Appendix B to this testimony.

⁸ This is Company Adjustment No. 10 of \$1,089,537 net the payroll portion of Company Adjustment No. 19 of (\$148,500).

⁹ Staff includes a full three percent increase for union and non-union employees for the raises effective May 2017 and March 2017, respectively. Staff also includes a prorated level of the three percent raise expected during the Rate Year.

is based on the three-year average of overtime hours times a current average overtime pay rate.¹⁰ Staff's Rate Year level of variable compensation is based on the Company's 2017 budget. To remove a Rate Year level of directly capitalized payroll, Staff proposes to apply an updated expense percentage based on the actual payroll capital projects for the twelve months ended April 30, 2017. Staff uses the same methodology as the Company to remove a Rate Year level of A&G capitalized payroll. Staff's net payroll adjustment increases jurisdictional expense by \$2,451,983.¹¹

Q18. PLEASE DISCUSS COMPANY ADJUSTMENT NOS. 15 AND 16 TO PENSION AND OTHER POST EMPLOYMENT BENEFITS ("OPEB") EXPENSE.

A18. In accordance with generally accepted accounting principles, VNG changed its accounting for pensions and OPEB following the Southern and AGLR merger, switching from a non-purchase accounting basis to a purchase accounting basis. VNG was required to recognize on the balance sheet full pension and OPEB liabilities that had previously been delayed in compliance with Financial Accounting Standards Board Accounting Standards Codification Topic 715, with offsetting entries to other comprehensive income ("OCI"). Effective July 1, 2016, the Company discontinued OCI accounting, and reclassified the balance in accumulated OCI to a regulatory asset account in compliance with Financial Accounting Standards Board Accounting Standards Codification Topic 980. For ratemaking purposes, the Company proposes to recognize the actuarially-based

¹⁰ Staff based the average rate on the actual overtime pay and hours for the twelve months ended April 2017.

¹¹ The main difference between Staff's adjustment and the Company's adjustment is that the Company started with employees and salaries as of November 1, 2016 and Staff used updated actual employee levels and pay as of April 2017. Using updated actuals is similar to the methodology Staff proposed in the 2011 Rate Case.

Rate Year level of pension and OPEB on a purchase accounting basis and amortize the associated regulatory asset. Company Adjustment Nos. 15 and 16 together increase jurisdictional expense by \$1,054,840.

Q19. DOES STAFF AGREE WITH THE COMPANY'S PROPOSAL TO USE A PURCHASE ACCOUNTING METHODOLOGY FOR RATEMAKING PURPOSES?

A19. No. Staff computes the actuarially based pension and OPEB cost accruals for the Rate Year on the non-purchase accounting basis,¹² which effectively continues the ratemaking methodology used prior to the merger. This is appropriate because the merger should have no impact on the regulatory recognition of these costs. Also, the Company represented that the accumulated OCI reclassification should have no rate impact and that the actuarially-determined pension and OPEB cost would remain the same for ratemaking purposes after the merger.¹³ Staff's adjustment to pension and OPEB expense decreases jurisdictional expense by \$1,247,008.¹⁴

Q20. PLEASE DISCUSS STAFF ADJUSTMENT NO. 13 AND COMPANY ADJUSTMENT NO. 13 TO HEALTH BENEFITS EXPENSE.

A20. The Company proposes to base its Rate Year level of health benefits expense on its 2017 budget plus an 8% increase for 2018. This Rate Year level of benefits expense is almost

¹² Based on the most recent actuarial report.

¹³ See the Company's Response to Staff Interrogatory No. 4-48 and the Company's Response to Staff Interrogatory No. 9-85 in Case No. PUE-2015-00113 in Appendix B to this testimony.

¹⁴ Staff proposes a separate adjustment in Staff Adjustment No. 18 to reflect a Rate Year level of A&G capitalized benefits which increases expense by \$212,617. This is an increase because Staff's total benefits expense adjustment is a decrease, which means that less will be capitalized.

a 50% increase from the Test Year level. Both Staff and the Company agree that the budget is overstated.¹⁵ Staff proposes to base the Rate Year level of health benefits expense on a Test Year level increased by 8%. This 8% increase is based on health benefits cost projections from Mercer, Price Waterhouse Cooper, and Willis Towers Watson for 2017. Staff's adjustment to health benefits expense increases jurisdictional expense by \$134,146, which is \$684,318 less than the Company's adjustment.

Other O&M Expense

Q21. PLEASE DISCUSS COMPANY ADJUSTMENT NOS. 17 AND 18 TO OUTSIDE SERVICES AND OTHER O&M EXPENSE.

A21. The Company proposes to adjust multiple categories of O&M expense in Adjustment Nos. 17 and 18 such as locating mains and services, pipeline integrity program, fleet services, facilities, marketing, regulatory, legal, office administration and supply, dues and subscriptions, and travel and entertainment, among others. To determine the Rate Year level for most of these expenses, the Company proposes to use its calendar year 2017 budget for September through December 2017 and the 2017 budget plus inflation for January through August 2018.¹⁶ Included in its regulatory expense category, the Company projects a total amount of rate case expense for the current case outside of the budget and proposes to include one-third of the expense in the cost of service. Rate Case

¹⁵ See the Company's Response to Staff Interrogatory No. 12-200 in Appendix B to this testimony. In this response, the Company states "upon further review, the Company determined the budget for Health Benefits was overstated."

¹⁶ VNG eliminated civic participation fees, promotional advertising, and fines and penalties from its Rate Year level of expense.

expense is discussed in a separate category below. Company Adjustment Nos. 17 and 18 together, excluding rate case expense, increase jurisdictional expense by \$64,065.

Q22. DID STAFF ANALYZE THE COMPANY'S 2017 BUDGET FOR OTHER O&M EXPENSE?

A22. Yes. Staff performed a budget vs. actual analysis for the past five years for VNG's other O&M expenses.¹⁷ Historically, VNG's actual other O&M expenses have exceeded the budget. Staff also analyzed Test Year actual expenses as well as updated actual data for the twelve months ended May 2017 in comparison to the 2017 budgeted levels. In total, the budgeted amounts were similar to, but lower than, both sets of recent actual data.

Q23. PLEASE DISCUSS STAFF ADJUSTMENT NO. 17 TO OTHER O&M EXPENSE.

A23. Staff proposes to use a Rate Year level of other O&M expense based on the Company's 2017 budget.¹⁸ Based on the budget vs. actual analysis and on-site meetings with the Company regarding its budgeting process, Staff believes that VNG's 2017 budget is reasonable for ratemaking purposes as it represents a level that can be reasonably predicted to occur during the Rate Year. However, Staff does not agree with the Company's use of an inflation factor because it is not appropriate to apply a factor to specific O&M cost categories that is determined based on a wide variety of mostly unrelated costs. The Company's inflation factor is a general factor which incorporates a Moody's Analytics estimate based on the U.S. Bureau of Labor Statistics for the

¹⁷ Staff includes outside services in the category of other O&M expense.

¹⁸ Staff agrees with the Company's removal of civic participation fees, promotional advertising, and fines and penalties from the Rate Year level. Staff also proposes to eliminate lobbying expense from the Rate Year level.

Consumer Price Index ("CPI"). The CPI includes inflationary effects of food, housing, apparel, transportation, medical care, recreation, education and communication, and other goods and services. Staff's adjustment to other O&M expense decreases jurisdictional expense by \$375,718.

Rate Case Expense

Q24. PLEASE DISCUSS THE ADJUSTMENT TO RATE CASE EXPENSE.

A24. As stated above, the Company proposes to amortize its projected level of rate case expense over three years.¹⁹ The Company projects a total rate case expense of \$1.3 million and includes an annual jurisdictional amount of amortization expense of \$410,886. After reviewing the Company's support for this projection and comparing it back to the 2011 Rate Case expense, Staff believes this amount is reasonably predicted to occur. Staff proposes to include one-fifth of the \$1.3 million as a normalized level of rate case expense. Since VNG's last rate case was filed more than three years ago in 2011, Staff believes that normalizing this expense over five years rather than three years is more reasonable. Rate case expense does not qualify as a regulatory asset since it does not meet the criteria for regulatory asset treatment.²⁰ Staff's adjustment increases jurisdictional expense by \$246,532, which is \$164,354 less than the Company's adjustment.

¹⁹ VNG also proposes to include the unamortized balance of rate case costs in rate base. Staff witness Wong discusses this proposal in his testimony.

²⁰ Typically for a cost to be considered for regulatory asset treatment, it (1) is nonrecurring or unusual in nature, (2) is beyond the control of the company, and (3) would materially and negatively affect financial results if expensed currently. Rate case costs are recurring and normal costs of a regulated utility and are within the utility's control.

1 *Service Company Charges*

2 **Q25. PLEASE BRIEFLY DISCUSS THE SERVICE COMPANIES.**

3 **A25.** AGL Services Company ("AGSC" or "Service Company") is a service company
 4 organized to provide certain centralized shared services to GAS and its affiliates,
 5 including VNG. AGSC is a wholly-owned subsidiary of GAS. Southern Company
 6 Services, Inc. ("SCS") is a service company organized to provide administrative,
 7 management, and other services to Southern's affiliates. SCS is a wholly-owned
 8 subsidiary of Southern. Accordingly, subsequent to the merger between AGLR and
 9 Southern, SCS has been authorized to provide centralized services to VNG, though
 10 AGSC continues to be the provider of most of VNG's centralized services.²¹ Currently,
 11 SCS charges VNG for its provision of services through AGSC.

12 **Q26. PLEASE DISCUSS COMPANY ADJUSTMENT NOS. 20, 22, AND 33 TO**
 13 **EXPENSES CHARGED FROM AGSC TO VNG.**

14 **A26.** To calculate a Rate Year level of expense, the Company proposes to use its 2017 budget
 15 for September through December 2017 and the 2017 budget plus inflation for January
 16 through August 2018. This Rate Year level is then allocated between O&M,
 17 depreciation, and taxes other than income tax based on these budgeted components.
 18 VNG also proposes three alterations to this Rate Year level of expense. First, VNG
 19 removes promotional advertising and civic participation fees from O&M. Second, VNG

²¹ The Commission approved the amended and revised service agreement in Case No. PUE-2016-00055. *See Application of Virginia Natural Gas, Inc., and AGL Services Company, For approval of an amended and restated services agreement pursuant to the Affiliates Act, Va. Code § 56-76 et seq., Case No. PUE-2016-00055, Doc. Con. Cen. No. 160650067, Order Granting Approval (June 29, 2016).*

removes costs related to the Southern merger which, according to VNG, are removed to "remain compliant with the Commission's Final Order in Case No. PUE-2015-00113."²² Third, the Company reduces O&M expense to reflect expected O&M savings associated with the new Customer Information System ("CIS") software. The Company also increases depreciation expense for the new CIS software based on a ten-year life. Below is a table summarizing the Company's adjustments to AGSC charges:

Table 2	
Summary of Company Adjustments to AGSC Charges	
O&M Expense	(\$655,213)
Depreciation Expense	\$1,591,302
Taxes Other Than Income Tax Expense	<u>\$7,909</u>
Total	<u><u>\$943,999</u></u>

Q27. PLEASE DISCUSS STAFF ADJUSTMENT NO. 19 TO SERVICE COMPANY CHARGES.

A27. Staff performed the same analysis on the Company's AGSC charges budget as it did with the Company's other O&M expense budget. After analyzing the historical budget vs. actual amounts and understanding the budgeting process, Staff believes that the Company's 2017 budget is reasonable for ratemaking purposes.²³ Staff's adjustment begins with the 2017 budgeted Service Company charges and follows a similar

²² See the Company's Response to Staff Informal Data Request No. 4-81 in Appendix B to this testimony.

²³ Staff also compared the 2017 budgeted AGSC charges with actual charges during the Test Year and twelve months ended May 31, 2017. The 2017 budgeted charges are lower than both sets of actual charges.

methodology as the Company's adjustments discussed above, but does not add an inflation factor for the same reasons discussed above. The exclusion of the inflation factor is the reason for the differences between Staff's and the Company's adjustments.

Staff also imputes an allocated interest charge in lieu of including allocated Service Company rate base, as discussed further below. Staff calculates this interest charge by dividing AGSC's interest expense for the twelve months ended March 2017 by its average balance of assets during the same period to develop AGSC's effective interest rate cost. Staff then multiplies this rate by the AGSC net assets that support VNG's operations. Below is a table summarizing Staff's adjustments to Service Company charges:

Table 3			
Summary of Adjustments to AGSC Charges			
	Staff	Company	Difference
O&M Expense	(\$1,165,587)	(\$655,213)	(\$510,374)
Depreciation Expense	\$1,562,268	\$1,591,302	(\$29,035)
Taxes Other Than Income Tax Expense	(\$4,710)	\$7,909	(\$12,620)
Interest Expense	\$47,524	\$0	\$47,524
Total	\$439,495	\$943,999	(\$504,504)

Q28. DOES THE COMPANY PROPOSE TO INCLUDE SERVICE COMPANY ASSETS IN VNG'S RATE BASE?

A28. Yes, the Company proposes to allocate a portion of AGSC plant, CWIP, accumulated depreciation, and accumulated deferred income taxes to VNG's rate base. This means the Company is proposing to recover financing costs, including interest expense and a return on equity component, associated with this allocated rate base.

Q29. DOES STAFF AGREE WITH THE COMPANY'S ALLOCATION OF SERVICE COMPANY PLANT TO VNG'S RATE BASE?

A29. No. Consistent with its position in the 2011 Rate Case and with its position in other rate cases,²⁴ Staff opposes allocating Service Company rate base to the utility. Instead Staff proposes to include an imputed interest expense along with the depreciation expense associated with this plant, as previously discussed. Staff's imputed interest expense permits the Company to recover AGSC's actual financing costs associated with the assets, and depreciation expense allows recovery of the assets over their service lives.

Q30. EXPLAIN WHY STAFF DISAGREES WITH THE COMPANY'S ALLOCATION OF SERVICE COMPANY ASSETS TO VNG'S RATE BASE.

A30. Staff disagrees with the Company for the following reasons. First, only assets owned by VNG and recorded on its books should be included in its rate base. Rate base should reflect the direct capital investment made by the utility to support the cost of providing service to its utility customers. Allocated AGSC net plant does not meet that standard, as the plant in question is not an investment made by VNG that needs to be supported by debt and/or equity at VNG.

²⁴ See Case Nos. PUE-2012-00038, PUE-2014-00026, PUE-2014-00035, PUE-2016-00033.

Second, service company charges should not include a return on equity component. Historically, centralized service companies have been set up to operate at cost, not as profit centers. Their purpose is to increase operating efficiencies by minimizing the cost of providing shared corporate and administrative services. They are designed to bill out 100% of their costs and not to generate a profit. Their balance sheets typically contain inter-company receivables with modest amounts of plant, and are typically supported by accrued expenses, accounts payables, inter-company payables, money pools, and other internal financing. AGSC is typical in this regard. Therefore, Staff sees no reason to impute a profit for an entity that is a cost center.

Q31. IS THE COMPANY'S PROPOSAL TO ALLOCATE SERVICE COMPANY ASSETS TO VNG'S RATE BASE COMPLIANT WITH THE COMMISSION-APPROVED SERVICE AGREEMENT?

A31. No. The Service Agreement, originally approved in Case No. PUE-2010-00070, requires VNG to pay the lower of cost or market for services received under this agreement. Therefore, VNG is required to pay no more than the actual cost of services performed by AGSC. The Company's adjustment applies the utility's regulated cost of capital, which primarily consists of long-term debt and equity cost rates, to the allocated AGSC plant. Since AGSC has no financing costs with the exception of money pool interest expense, there is no reason for VNG to recover through base rates a cost that neither VNG nor AGSC bears, nor any reason to construct a cost recovery mechanism that attempts to circumvent the Commission-approved Service Agreement. Staff's adjustment to impute

1 an appropriate amount of AGSC interest expense results in VNG and its customers
2 paying no more than AGSC's actual financing costs.

3 *Income Tax Expense*

4 **Q32. PLEASE DISCUSS THE ADJUSTMENTS TO INCOME TAX EXPENSE.**

5 **A32.** The purpose of the income tax expense adjustments is to reflect an appropriate Rate Year
6 level of income tax expense. Staff's and the Company's adjustments both include 1) a
7 computation of per book income tax and 2) a computation of the income tax effect of the
8 ratemaking adjustments. Both Staff and the Company use a combined statutory income
9 tax rate of 38.90%. The majority of the difference between Staff and the Company arises
10 from the difference in the other ratemaking adjustments. Staff's adjustments decrease
11 jurisdictional expense by \$5,025,384.

12 **PGA AUDIT**

13 *QBF Audit Findings and Recommendations*

14 **Q33. PLEASE BRIEFLY DESCRIBE THE COMPANY'S QBF MECHANISM.**

15 **A33.** The QBF is a rate mechanism designed to recover VNG's gas costs on a dollar-for-dollar
16 basis.

17 **Q34. DID STAFF RECENTLY CONDUCT AN AUDIT OF THE COMPANY'S QBF**
18 **MECHANISM?**

1 **A34.** Yes. Staff conducted an audit of the QBF rate mechanism for the twelve months ended
2 August 31, 2016. Such audit was conducted pursuant to the Commission's on-going
3 authority under Code § 56-36. Staff prepared an audit report detailing its audit and
4 resulting findings, which it provided to the Company on August 2, 2017. Staff's audit
5 verified the Company's cumulative QBF under-recovery balance to be collected from
6 customers in the amount of \$1,401,632, as of August 31, 2016. Further, Staff's audit
7 identified issues with several aspects of the Company's QBF computations, and Staff's
8 audit report included findings and recommendations on the prospective treatment of such
9 computations. Since this is the first rate proceeding following its audit, Staff
10 recommends that the Commission make a determination in this proceeding on the
11 prospective treatment of these computations. Some of Staff's recommendations require
12 tariff revisions, which are discussed briefly by Staff witness Grant.

13 **Q35. PLEASE EXPLAIN EACH OF THE ISSUES STAFF IDENTIFIED IN ITS AUDIT**
14 **OF THE QBF MECHANISM AND STAFF'S RECOMMENDATION RELATED**
15 **TO EACH ISSUE.**

16 **A35.** Staff proposes various recommendations concerning the QBF. Staff believes that the
17 Commission's determination on such issues should be implemented prospectively
18 beginning with the first QBF filing after the date of the Commission's Final Order in this
19 proceeding. Such issues are as follows:

- 20 1) During Staff's audit it became evident that the Company did not differentiate between
21 jurisdictional and non-jurisdictional customers for revenue collections or gas expense.
22 This effectively means that the deferral balance is on a total system basis and includes

1 amounts over which the Commission does not have jurisdiction. Staff believes it is
2 appropriate to only include amounts in the QBF for which the Commission has
3 jurisdiction. Staff recommends that the Commission direct the Company to manage
4 its deferral on a jurisdictional basis.

5 2) VNG utilized end of month balances in its calculation of carrying charges on its gas
6 inventory and gas deferral. Staff recommends using a two-month average balance in
7 the calculation of actual carrying costs in the QBF. VNG's use of the month end
8 balance implies the inventory balance at the beginning of the month was identical
9 when it was not. Staff recommends that the Commission direct the Company to
10 utilize a two-month average balance for all calculations of carrying charges in its
11 QBF.

12 3) VNG is currently not recording the debt and equity portions of gas storage carrying
13 charges separately.²⁵ Staff believes that the QBF should not impact a Company's cost
14 of service.²⁶ Accordingly, Staff recommends that the Commission direct the
15 Company to book carrying charges that include an equity return separately from the
16 debt component to ensure the Company excludes such equity return from any future
17 cost of service.

²⁵ The entry to record storage carrying costs is a debit to deferred gas costs - commodity (account 162.204) and a credit to gas storage carrying cost (account 448.500).

²⁶ Staff and the Company both propose an adjustment to eliminate gas storage carrying charges from the cost of service.

4) A cumulative under-recovery balance creates a difference between the Company's books and its tax return, necessitating the recordation of ADIT on the Company's books.²⁷ While the Company is recording these ADIT amounts on its books, such amounts are not currently being netted with, and thus not reducing, the under-recovery balances in the calculation of gas deferral carrying charges.²⁸ ADIT amounts associated with QBF under-recovery balances represent a source of cost-free capital to the Company. Thus, Staff recommends that the Commission direct the Company to net these ADIT amounts with any cumulative under-recovery balance to reduce the carrying costs recovered from ratepayers through the QBF.

5) VNG calculates bad debt expense using the bad debt rate from the last rate case. If bad debt expense associated with gas costs is recovered through the QBF, it should be subject to dollar-for-dollar recovery much like the gas costs themselves. Staff recommends the Commission direct the Company to utilize the actual bad debt rate for all bad debt expense true-ups in lieu of the amounts utilized in the Company's last rate case.

6) Gas cost uncollectibles expense is not currently trued-up as a component of the QBF computation. Rather, it is calculated based on projected gas costs and recovered through the QBF without being trued-up to reflect uncollectibles expense associated with actual gas costs. If bad debt expense associated with gas costs is recovered

²⁷ A cumulative over-recovery position is treated the same on the Company's books and its tax return. Thus, no ADIT is recorded associated with an over-recovery position.

²⁸ Such balances are also not reducing rate base in base rates.

through the QBF, it should be subject to dollar-for-dollar recovery much like the gas costs themselves. Staff recommends the Commission direct the Company to utilize the actual bad debt amounts in lieu of projections when applicable for the purposes of booking and calculating the amounts to recover from customers through the QBF.

- 7) VNG calculates bad debt expense using only the commodity portion of gas costs in its QBF computation. However, the Company's gas costs also include transportation and storage costs that are recovered through the Company's QBF. Because of this, there is an amount of bad debt expense associated with transportation and demand costs that is not being recovered by the Company. Accordingly, Staff recommends the Commission direct the Company to calculate bad debt expense on all gas costs instead of using solely commodity costs to calculate the expense amount.

SALES & USE TAX

Q36. PLEASE DISCUSS THE COMPANY'S SALES AND USE TAX SURCHARGE.

A36. Following the passage of HB5018 in 2004, public utilities were authorized to recover from customers the incremental increase in Virginia Sales and Use Tax ("VSUT") resulting from the provisions of HB5018 by means of a surcharge. This authorization became effective September 1, 2004.

Q37. PLEASE DISCUSS STAFF ADJUSTMENT NO. 22 TO ROLL THE COMPANY'S SALES AND USE TAX SURCHARGE INTO BASE RATES.

A37. Staff proposes an adjustment to roll-in a going level of VSUT expense into the Rate Year. Effective at the beginning of the Rate Year, this going level of VSUT expenses will be collected through base rates, not the VSUT surcharge.

The Company recorded jurisdictional VSUT expense in the amount of \$49,210²⁹ during the Test Year. However, in addition to this amount, the Company recorded a \$67,678³¹ non-recurring credit to expense during the Test Year related to VSUT expense on a jurisdictional basis. Staff's adjustment removes this credit in order to reflect a Rate Year level of VSUT expense. Staff's adjustment increases expense by \$67,678³² on a jurisdictional basis.

Q38. DOES ANY ACTION NEED TO BE TAKEN AFTER THE VSUT SURCHARGE IS ROLLED INTO BASE RATES?

A38. Yes. The net over/under collection amount as of September 1, 2017 will either be refunded or collected from customers through an administrative VSUT filing with the Commission's Divisions of Public Utility Regulation and Utility Accounting and Finance through the surcharge mechanism.

CONCLUSION

Q39. PLEASE SUMMARIZE STAFF'S RECOMMENDATIONS IN THIS TESTIMONY.

²⁹ \$52,098 times 94.457% equals \$49,210.

³⁰ See the Company's Response to Staff Interrogatory No. 15- 209 in Appendix B to this testimony.

³¹ See the Company's Response to Staff Interrogatory No. 15-210 in Appendix B to this testimony.

³² \$71,650 times 94.457% equals \$67,678.

1 **A39.** My testimony supports the following findings and recommendations:

- 2 1) Staff recommends that the Commission find Staff's proposed adjustments to the Rate
3 Year Analysis reasonable and authorize a total non-gas, base rate revenue increase of
4 \$25.77 million to provide VNG the opportunity to earn an ROE at the 8.75% mid-
5 point of Staff witness Gereaux's ROE range. This increase includes an incremental
6 increase of approximately \$12.36 million above the rates already charged to
7 customers for SAVE.
- 8 2) Staff recommends that the Commission direct the Company to manage its QBF
9 deferral on a jurisdictional basis.
- 10 3) Staff recommends that the Commission direct the Company to utilize a two-month
11 average balance for any calculation of carrying charges in its QBF.
- 12 4) Staff recommends that the Commission direct the Company to book carrying charges
13 that include an equity return separately from the debt component to ensure the
14 Company excludes such equity return from any future cost of service.
- 15 5) Staff recommends that the Commission direct the Company to net ADIT amounts
16 with any cumulative under-recovery balance to reduce the carrying costs recovered
17 from ratepayers through the QBF.
- 18 6) Staff recommends the Commission direct the Company utilize the actual bad debt rate
19 for all bad debt expense true-ups in lieu of the amounts utilized in the Company's last
20 rate case.
- 21 7) Staff recommends the Commission direct the Company to utilize the actual bad debt
22 amounts in lieu of projections when applicable for the purposes of booking and
23 calculating the amounts to recover from customers through the QBF.
- 24 8) Staff recommends the Commission direct the Company to calculate bad debt expense
25 on all gas costs instead of using solely commodity costs to calculate the expense
26 amount.

27 **Q40. DOES THIS CONCLUDE YOUR TESTIMONY?**

28 **A40.** Yes, it does.

Virginia Natural Gas, Inc.
Case No. PUE-2016-00143
Rate of Return Statement - Per Books
For the Test Year Ended September 30, 2016

Line No.	Description	Total Company Per Books (1)	HRX & SAVE Equity Adjustments (2)	Virginia Regulatory Books (3)	Non-Jurisdictional (4)	Virginia Jurisdictional Cost of Service (5)
Operating Revenue:						
1	Non-Gas Base Rate Revenue	117,431,951		117,431,951	10,033,150	107,398,801
2	Gas Revenue	82,363,366		82,363,366	11,829,531	70,533,834
3	SAVE - ASF	10,007,189	82,753	10,089,943	1,070,830	9,019,012
4	SAVE - SACA	(219,416)		(219,416)	(23,298)	(196,127)
5	CARE/RNA Revenue	33,678		33,678	0	33,678
6	WNA Revenue	13,829,847		13,829,847	0	13,829,847
7	Late Payment Fees	943,489		943,489	123,843	819,645
8	Other Operating Revenues	17,066,225		17,066,225	26,196	17,040,029
9	Total Operating Revenues	241,456,328	82,753	241,539,082	23,060,362	218,478,719
Operating Revenue Deductions:						
10	Operation & Maintenance Expense (less Gas)	60,937,395		60,937,395	3,378,001	57,559,394
11	Gas Expense	82,363,366		82,363,366	11,829,531	70,533,834
12	Depreciation & Amortization	30,782,709	268,607	31,051,316	1,829,388	29,221,928
13	Income Taxes	21,818,987	(81,436)	21,737,551	2,389,949	19,347,602
14	Taxes Other than Income Taxes	8,423,944	4,290	8,428,234	450,077	7,978,157
15	(Gain)/Loss on Disposition of Property	18,761		18,761	18,761	0
16	Total Operating Revenue Deductions	204,345,162	191,460	204,536,622	19,895,707	184,640,915
17	Operating Income	37,111,166	(108,707)	37,002,459	3,164,655	33,837,804
18	Plus: AFUDC	0		0	0	0
19	Less: Charitable Contributions	0		0	0	0
20	Less: Interest on Customer Deposits	52,598		52,598	6,725	45,873
21	Less: Interest on Supplier Refunds	25,706		25,706	3,287	22,420
22	Less: Other Interest Expense/(Income)	0		0	0	0
23	Adjusted Operating Income	37,032,861	(108,707)	36,924,155	3,154,644	33,769,511
24	Plus: Other Income/(Expense)	1,214,404		1,214,404	1,214,404	0
25	Less: Interest Expense	18,543,867	19,205	18,563,072	1,128,693	17,434,378
26	Less: Preferred Dividends	0		0	0	0
27	Less: JDC Capital Expense	0		0	0	0
28	Income Available for Common Equity	19,703,399	(127,912)	19,575,487	3,240,355	16,335,133
Rate Base:						
29	Allowance for Working Capital	50,045,971	24,883	50,070,853	4,057,121	46,013,732
30	Net Utility Plant In Service	1,023,064,270	11,099,735	1,034,164,005	218,338,896	815,825,109
31	Other Rate Base Deductions	258,029,812	0	258,029,812	25,570,290	232,459,522
32	Total Rate Base	815,080,428	11,124,618	828,205,048	196,825,727	629,379,319
33	Total Capital	815,080,428	11,124,618	828,205,048	196,825,727	629,379,319
34	Common Equity Capital	397,487,929	5,425,110	402,913,040	95,985,437	306,927,603
35	Rate of Return Earned on Rate Base	4.54%		4.47%		5.37%
36	Rate of Return Earned on Common Equity	4.96%		4.86%		5.32%

Virginia Natural Gas, Inc.
Case No. PUE-2016-00143
Rate of Return Statement - Adjusted
For the Test Year Ended September 30, 2016

Line No.	Description	Virginia Jurisdictional Cost of Service (1)	Ratemaking Adjustments Per Sch. A (2)	Amounts After Adjustments (3)	Additional Revenue Required For 8.75% ROE (4)	Amounts After Additional Revenue Requirement (5)
<u>Operating Revenue:</u>						
1	Non-Gas Base Rate Revenue	107,398,801	15,306,358	122,705,159	25,771,880	148,477,038
2	Gas Revenue	70,533,834	14,797,924	85,331,758		85,331,758
3	SAVE - ASF	9,019,012	4,389,269	13,408,281	(13,408,281)	0
4	SAVE - SACA	(196,127)	196,127	0		0
5	CARE/RNA Revenue	33,678	(33,678)	0		0
6	WNA Revenue	13,829,847	(13,829,847)	0		0
7	Late Payment Fees	819,645	23,031	842,677		842,677
8	Other Operating Revenues	17,040,029	(2,040,011)	15,000,018		15,000,018
9	Total Operating Revenues	<u>218,478,719</u>	<u>18,809,174</u>	<u>237,287,893</u>	<u>12,363,598</u>	<u>249,651,491</u>
<u>Operating Revenue Deductions:</u>						
10	Operation & Maintenance Expense (less Gas)	57,559,394	496,201	58,055,595	62,919	58,118,514
11	Gas Expense	70,533,834	14,797,924	85,331,758		85,331,758
12	Depreciation & Amortization	29,221,928	3,753,353	32,975,282		32,975,282
13	Income Taxes	19,347,602	(5,025,384)	14,322,217	4,784,964	19,107,182
14	Taxes Other than Income Taxes	7,978,157	342,896	8,321,053		8,321,053
15	(Gain)/Loss on Disposition of Property	0	0	0		0
16	Total Operating Revenue Deductions	<u>184,640,915</u>	<u>14,364,990</u>	<u>199,005,906</u>	<u>4,847,883</u>	<u>203,853,789</u>
17	Operating Income	33,837,804	4,444,184	38,281,987	7,515,715	45,797,703
18	Plus: AFUDC	0	0	0		0
19	Less: Charitable Contributions	0	0	0		0
20	Less: Interest on Customer Deposits	45,873	1,529	47,403		47,403
21	Less: Interest on Supplier Refunds	22,420	(21,652)	768		768
22	Less: Other Interest Expense/(Income)	0	0	0		0
23	Adjusted Operating Income	<u>33,769,511</u>	<u>4,464,306</u>	<u>38,233,817</u>	<u>7,515,715</u>	<u>45,749,533</u>
24	Plus: Other Income/(Expense)	0	0	0		0
25	Less: Interest Expense	17,434,378	(1,687,626)	15,746,752		15,746,752
26	Less: Preferred Dividends	0	0	0		0
27	Less: JDC Capital Expense	0	0	0		0
28	Income Available for Common Equity	<u>16,335,133</u>	<u>6,151,932</u>	<u>22,487,065</u>	<u>7,515,715</u>	<u>30,002,780</u>
<u>Rate Base:</u>						
29	Allowance for Working Capital	46,013,732	(3,024,992)	42,988,740		42,988,740
30	Net Utility Plant in Service	815,825,109	53,572,560	869,397,669		869,397,669
31	Other Rate Base Deductions	232,459,522	(24,324,585)	208,134,937		208,134,937
32	Total Rate Base	<u>629,379,319</u>	<u>74,872,153</u>	<u>704,251,472</u>	<u>0</u>	<u>704,251,472</u>
33	Total Capital	629,379,319	74,872,153	704,251,472	0	704,251,472
34	Common Equity Capital	306,927,603	35,961,315	342,888,918		342,888,918
35	Rate of Return Earned on Rate Base	5.37%		5.43%		6.50%
36	Rate of Return Earned on Common Equity	5.32%		6.56%		8.75%

Virginia Natural Gas, Inc.
Case No. PUE-2016-00143
Rate Base Statement - Per Books
For the Test Year Ended September 30, 2016

Line No.	Description	Total Company Per Books (1)	HRX & SAVE Equity Adjustments (2)	Virginia Regulatory Books (3)	Non-Jurisdictional (4)	Virginia Jurisdictional Cost of Service (5)
<u>Allowance for Working Capital:</u>						
1	Materials & Supplies (13-Month Average)	278,671		278,671	15,322	263,348
2	Cash Working Capital (incl. Lead/Lag Study)	34,412,224	24,883	34,437,107	2,474,265	31,962,842
3	Deferred Gas Expense (13-Month Average)	(4,063,568)		(4,063,568)	(583,635)	(3,479,934)
4	Gas Inventory	19,418,644		19,418,644	2,151,168	17,267,475
5	Total Allowance for Working Capital	<u>50,045,971</u>	<u>24,883</u>	<u>50,070,853</u>	<u>4,057,121</u>	<u>46,013,732</u>
<u>Net Utility Plant in Service:</u>						
6	Utility Plant in Service	1,228,013,892	12,339,895	1,240,353,787	73,802,239	1,166,551,548
7	Construction Work in Progress	17,307,484		17,307,484	1,012,450	16,295,034
8	Acquisition Adjustment	165,293,601		165,293,601	165,293,601	
9	Less: Accumulated Depreciation and Amortization	387,550,707	1,240,160	388,790,867	21,769,394	367,021,473
10	Plus: Customer Advances for Construction	0		0	0	0
11	Total Net Utility Plant in Service	<u>1,023,064,270</u>	<u>11,099,735</u>	<u>1,034,164,005</u>	<u>218,338,896</u>	<u>815,825,109</u>
<u>Other Rate Base Deductions:</u>						
15	Customer Deposits (13-Month Average)	14,334,306		14,334,306	1,832,688	12,501,618
16	Supplier Refunds (13-Month Average)	325,305		325,305	41,591	283,714
17	Accumulated Deferred Income Taxes	243,370,201		243,370,201	23,696,010	219,674,191
18	Other Cost Free Capital	0		0	0	0
19	Total Other Rate Base Deductions	<u>258,029,812</u>	<u>0</u>	<u>258,029,812</u>	<u>25,570,290</u>	<u>232,459,522</u>
20	Total Rate Base	<u>815,080,428</u>	<u>11,124,818</u>	<u>826,205,046</u>	<u>196,825,727</u>	<u>629,379,319</u>

Virginia Natural Gas, Inc.
Case No. PUE-2016-00143
Rate Base Statement - Adjusted
For the Test Year Ended September 30, 2016

Line No.	Description	Virginia Jurisdictional Cost of Service (1)	Ratemaking Adjustments Per Sch. A (2)	Amounts After Adjustments (3)
<u>Allowance for Working Capital:</u>				
1	Materials & Supplies (13-Month Average)	263,348	(9,366)	253,982
2	Cash Working Capital (incl. Lead/Lag Study)	31,962,842	10,771,916	42,734,758
3	Deferred Gas Expense (13-Month Average)	(3,479,934)	3,479,934	0
4	Gas Inventory	17,267,475	(17,267,475)	0
5	Total Allowance for Working Capital	<u>46,013,732</u>	<u>(3,024,992)</u>	<u>42,988,740</u>
<u>Net Utility Plant in Service:</u>				
6	Utility Plant in Service	1,166,551,548	82,621,191	1,249,172,738
7	Construction Work in Progress	16,295,034	0	16,295,034
8	Acquisition Adjustment	0	0	0
9	Less: Accumulated Depreciation and Amortization	367,021,473	29,048,631	396,070,104
10	Plus: Customer Advances for Construction	0	0	0
11	Total Net Utility Plant in Service	<u>815,825,109</u>	<u>53,572,560</u>	<u>869,397,669</u>
<u>Other Rate Base Deductions:</u>				
12	Customer Deposits (13-Month Average)	12,501,618	(650,991)	11,850,626
13	Supplier Refunds (13-Month Average)	283,714	(91,818)	191,896
14	Accumulated Deferred Income Taxes	219,674,191	(23,581,776)	196,092,415
15	Other Cost Free Capital	0	0	0
16	Total Other Rate Base Deductions	<u>232,459,522</u>	<u>(24,324,585)</u>	<u>208,134,937</u>
17	Total Rate Base	<u>629,379,319</u>	<u>74,872,153</u>	<u>704,251,472</u>

Virginia Natural Gas, Inc.
Case No. PUE-2016-00143
Summary of Company Adjustments and Staff Adjustments
Reflected in Col. (2) of Statements II & IV

Staff Adj. No.	Company Adj. No.	Description	Staff Amount	Company Amount	Difference
<u>Non-Gas Base Rate Revenue</u>					
1	1	Adjust Base Rate Revenues to Rate Year	15,306,358	12,576,954	2,729,404
		<u>Total Adjustments to Non-Gas Base Rate Revenue</u>	15,306,358	12,576,954	2,729,404
<u>Gas Revenue</u>					
2	2	Adjust Gas Revenues to Rate Year	14,797,924	19,712,563	(4,914,640)
		<u>Total Adjustments to Gas Revenue</u>	14,797,924	19,712,563	(4,914,640)
<u>Rider Revenue</u>					
3	4	Adjust SAVE - ASF Revenues to Rate Year	4,389,289	4,585,395	(196,126)
4	-	Eliminate TY SAVE - SACA Revenues	196,127	0	196,127
5	5	Eliminate TY CARE/RNA Revenues	(33,678)	(33,678)	0
6	6	Eliminate TY Weather Normalization Adjustment Revenues	(13,829,847)	(13,829,847)	0
		<u>Total Adjustments to Rider Revenue</u>	(9,278,128)	(9,278,129)	2
<u>Other Operating Revenue</u>					
7	7	Adjust Other Operating Revenues to Rate Year	(359,440)	(359,440)	(0)
8	8	Eliminate Gas Storage Carrying Cost	(1,680,571)	(1,680,571)	0
9	3	Adjust Late Payment Fees to Rate Year	23,031	23,031	0
		<u>Total Adjustments to Other Operating Revenue</u>	(2,016,980)	(2,016,980)	(0)
		<u>Total Adjustments to Operating Revenues</u>	18,809,174	20,994,408	(2,185,234)
<u>Operation & Maintenance Expense</u>					
10	10	Adjust Payroll to Rate Year	2,838,501	1,089,537	1,748,964
11	11	Adjust Uncollectible Expenses to Rate Year	63,913	61,025	2,888
12	12	Adjust 401K Benefits to Rate Year	184,113	66,458	97,655
13	13	Adjust Health Benefits to Rate Year	134,148	818,484	(684,316)
14	14	Adjust Other Benefits to Rate Year	(74,072)	(73,815)	(257)
15	15	Adjust Pension Benefits to Rate Year	(1,226,443)	1,207,748	(2,434,191)
16	16	Adjust Other Post Retirement Benefits to Rate Year	(20,564)	(152,907)	132,343
17	17&18	Adjust Other Operation and Maintenance expenses to Rate Year	(375,718)	64,065	(439,783)
18	18	Adjust Capitalized Expenses to Rate Year	(195,008)	(1,105,259)	910,252
19	20	Adjust AGSC Charges to VNG to Rate Year	(1,118,063)	(655,213)	(462,850)
20	9	Adjust Gas Costs to Rate Year	14,797,924	19,712,563	(4,914,640)
21	-	Eliminate TY CARE Program Expense	(8,814)	0	(8,814)
22	-	Eliminate Expense Credit Related to Sales & Use Tax	67,678	0	67,678
23	18	Include Normalized Rate Case Expense	248,532	410,888	(164,356)
		<u>Total Adjustments to Operation & Maintenance Expense</u>	15,294,125	21,443,552	(8,149,427)

Virginia Natural Gas, Inc.
Case No. PUE-2016-00143
Summary of Company Adjustments and Staff Adjustments
Reflected in Col. (2) of Statements II & IV

Staff Adj. No.	Company Adj. No.	Description	Staff Amount	Company Amount	Difference
<u>Depreciation & Amortization Expense</u>					
24	21	Adjust Depreciation and Amortization Expenses to Rate Year	2,191,088	4,089,993	(1,878,908)
25	22	Adjust Depreciation Expenses from Services Company to Rate Year	1,562,268	1,591,302	(29,035)
		Total Adjustments to Depreciation & Amortization Expense	3,753,353	5,681,296	(1,907,942)
<u>Income Tax Expense</u>					
26	23-29	Current Income Tax Expense	10,358,354	6,308,993	4,049,361
27	30	Deferred Income Tax Expense	(15,381,738)	(14,093,429)	(1,288,309)
		Total Adjustments to Income Tax Expense	(5,023,384)	(7,784,436)	2,761,051
<u>Taxes Other than Income Taxes</u>					
28	31	Adjust Property Taxes to Rate Year	156,070	953,267	(797,197)
29	32	Adjust Payroll Taxes to Rate Year	191,536	60,403	131,133
30	33	Adjust Allocated Taxes Other than Income from Services Company to Rate Year	(4,710)	7,909	(12,620)
		Total Adjustments to Taxes Other than Income Taxes	342,896	1,021,580	(678,684)
		TOTAL ADJUSTMENTS TO OPERATING INCOME	4,444,184	654,417	3,789,767
<u>Interest Expense</u>					
31	34	Adjust Interest Expense on Customer Deposits to Rate Year	1,529	3,827	(2,298)
32	35	Adjust Interest Expense on Supplier Refunds to Rate Year	(21,652)	(13,129)	(8,523)
33	36	Adjust Interest Expense Based on Proposed Weighted Cost of Capital for Rate-making Purposes	(1,687,626)	(1,160,202)	(527,424)
		Total Adjustments to Interest Expense	(1,707,749)	(1,169,504)	(538,245)
		TOTAL ADJUSTMENTS TO INCOME AVAILABLE FOR COMMON EQUITY	6,151,932	1,823,921	4,328,012
<u>Allowance for Working Capital</u>					
34	38	Adjust Material and Supplies to Rate Year	(9,366)	(7,783)	(1,583)
35	39	Adjust Cash Working Capital Based on Lead-Lag Study to Rate Year	(5,179,258)	191,724	(5,370,982)
36	40	Adjust Other Cash Working Capital to Rate Year	15,951,174	15,818,145	133,029
37	41	Eliminate Deferred PGA Balance from Rate Year	3,479,934	3,479,934	0
38	42	Eliminate Fuel Inventory balance from Rate Year	(17,267,475)	(17,267,475)	0
		Total Adjustments to the Allowance for Working Capital	(3,024,992)	2,214,544	(5,239,536)
<u>Net Utility Plant in Service</u>					
39	43	Adjust Plant to Rate Year	82,621,191	112,169,875	(29,548,684)
40	43	Allocate Service Company Plant to VNG	0	22,989,795	(22,989,795)
41	44	Adjust CWIP to Rate Year	0	0	0
42	44	Allocate Service Company CWIP to VNG	0	1,924,630	(1,924,630)
43	45	Adjust Accumulated Depreciation to Rate Year	29,048,631	33,130,459	(4,081,828)
44	45	Allocate Service Company Accumulated Depreciation to VNG	0	1,220,046	(1,220,046)
		Total Adjustments to Net Utility Plant in Service	53,572,560	102,713,795	(49,141,235)
<u>Other Rate Base Deductions</u>					
45	46	Adjust Customer Deposits to Rate Year	(650,991)	(76,483)	(574,508)
46	47	Adjust Supplier Refunds to Rate Year	(91,818)	(167,577)	75,760
47	48	Adjust Deferred Income Taxes to Rate Year	(23,581,776)	(2,106,733)	(21,475,044)
		Total Other Rate Base Deductions	(24,324,585)	(2,350,793)	(21,973,792)
		TOTAL ADJUSTMENTS TO RATE BASE	74,872,153	107,279,132	(32,406,979)
<u>Common Equity Capital</u>					
48	49	To Adjust Common Equity Based on Proposed Capital Structure	35,961,315	52,316,506	(16,355,191)

Cash Working Capital - Fully Adjusted

Cash Working Capital - Fully Adjusted											
Line No.	Description	Total Virginia Per Books Amounts	Jurisdictional Factor	Virginia Jurisdictional Amounts	Rate-making Adjustments	Jurisdictional Adjusted Amounts	Average Daily Amount	Revenue Lag Days	Expense (Lead)/Lag Days	Net (Lead)/Lag Days	Working Capital (Provided)/Required
	O&M Expenses:										
1	Purchased Gas Expense	82,363,366	83.04%	70,533,835	14,797,524	85,331,358	233,780	43.28	31.30	11.96	2,760,910
2	OP&B Expenses	(382,530)	94.48%	(381,344)	(20,564)	(381,908)	(1,046)	43.28	-	43.28	(45,269)
3	Pension Expense	2,191,373	94.48%	2,069,897	(1,220,443)	843,453	2,311	43.20	-	43.26	99,978
4	Payroll Expense	18,184,402	94.48%	15,287,236	3,058,551	18,345,788	50,262	43.20	11.91	31.35	1,576,772
5	Variable Compensation Expense	2,064,000	94.48%	1,949,841	(220,050)	1,729,591	4,739	43.26	239.99	(166.73)	(372,202)
6	Health Benefits Expense	1,775,239	94.48%	1,678,830	134,140	1,810,977	4,982	43.28	10.99	32.28	100,148
7	Other Benefits Expense	99,918	94.48%	94,851	(74,072)	10,578	29	43.28	12.15	31.12	802
8	Uncollectible Expenses	749,732	94.48%	703,171	93,913	772,084	347.74	43.28	-	43.28	(304,471)
9	401k Benefits Expense	869,316	94.48%	821,128	184,119	985,239	2,699	43.26	11.00	32.17	86,841
10	Allocations from Service Company	18,848,100	94.48%	17,801,392	(1,118,063)	18,043,326	45,708	43.28	21.60	21.67	999,341
11	Other O&M Expenses	18,530,097	94.48%	17,321,782	(379,519.43)	18,842,222	48,417	43.28	40.31	2.90	137,735
12	Total O&M Expenses	143,300,760		128,093,228	14,979,913	143,073,143	391,861				4,228,600
13	Depreciation and Amortization Expense	31,051,318	94.11%	29,221,928	3,753,353	32,975,282	90,343	43.20	-	43.20	3,908,696
	Income Tax Expense:										
14	Income Taxes (Current)	(17,282,104)	89.01%	(16,282,012)	10,356,354	(5,025,857)	(13,769)	43.28	38.00	5.20	(72,493)
15	Income Taxes (Deferred)	39,019,654	89.01%	34,729,812	(15,381,738)	19,347,874	53,008	43.20	-	43.20	2,293,384
16	Total Income Tax Expense	21,737,650		19,347,801	(5,025,384)	14,322,217	39,239				2,220,891
	Taxes Other Than Income:										
17	Payroll Tax Expense	997,648	94.56%	944,371	191,536	1,135,907	3,112	43.28	16.78	27.50	85,594
18	Property Tax Expense	7,430,588	94.66%	7,033,787	158,079	7,189,539	19,698	43.20	107.41	(64.14)	(1,263,430)
19	Total Taxes Other Than Income	8,428,234		7,978,157	347,606	8,325,763	22,810				(1,177,835)
20	AFUDC	-	0.00%	-	-	-	-	43.28	-	43.28	-
21	Charitable Donations	-	94.48%	-	-	-	-	43.26	-	43.26	-
22	Interest on Customer Deposits	62,598	87.21%	45,873	1,529	47,402	130	43.20	102.60	(139.24)	(18,082)
23	Interest on Supplier Refunds	25,700	87.21%	22,419	(21,052)	767	2	43.28	182.60	(139.24)	(293)
24	Other Income/Expense	1,214,404	0.00%	-	-	-	-	43.20	-	43.26	-
25	LT Interest Expense	18,503,072	93.92%	17,434,378	(1,687,628)	15,746,753	43,142	43.20	45.75	(2.49)	(107,229)
26	ST Interest Expense	-	0.00%	-	-	-	-	43.20	-	43.20	-
27	JOC Expense	-	0.00%	-	-	-	-	43.26	-	43.26	-
28	Income Available for Common Equity	19,575,469		18,335,134	35,981,315	52,296,449	143,278	43.20	43.20	-	-
29	Total	243,949,131		218,476,718	48,308,058	266,787,775	730,925				9,052,721
	Plus:										
30	State Withholding Taxes	1,100,588	94.66%	1,041,815	-	1,041,815	2,854	43.28	14.74	28.52	81,413
31	Federal Withholding Taxes	3,314,431	94.66%	3,137,437	-	3,137,437	8,598	43.28	14.73	28.53	243,249
32	State Consumption Tax	2,498,746	94.66%	2,365,310	-	2,365,310	6,400	43.20	52.18	(8.92)	(57,764)
33	Local Consumption Tax	661,060	94.66%	626,327	-	626,327	1,716	43.20	52.18	(8.92)	(15,301)
34	Customer Utility Tax	11,409,037	94.68%	10,799,782	-	10,799,782	29,598	43.20	52.20	(8.93)	(204,230)
35	Federal Excise Tax	-	94.66%	-	-	-	-	43.20	89.75	(28.49)	-
36	Motor Fuel Tax	22,207	94.68%	21,021	-	21,021	58	43.20	85.07	(21.81)	(1,250)
37	Sales and Use Tax	101,408	94.68%	95,993	-	95,993	263	43.28	32.10	11.10	2,830
38	Total Cash Working Capital (Lead/Lag)										9,043,747
39	Balance Sheet Items										17,738,837
40	Total Cash Working Capital										26,782,584
41	Per Book Jurisdictional Cash Working Capital										31,092,842
42	Staff Jurisdictional Adjustment										(5,179,288)

Virginia Natural Gas, Inc.
Case No. PUE-2016-00143
For the Test Year Ended September 30, 2016
Balance Sheet Analysis

Line No.	Account	Description	13-Month Average	Jurisdictional Factor	Jurisdictional Average
1	100121	Utility Capital Payroll Accrued - Need to Reverse Sign (1)	(111,292)	94.47%	(105,134)
2	161400	VNG Pre-94 Regulatory Asset Amortization	5,421,030	94.43%	5,119,308
3	162150	Other Long-Term Assets	336,109	93.92%	315,672
4	162450	ATPI Capitalized Clearing	(0)	94.47%	(0)
5	164100	Net Pension Asset	63,307	94.45%	59,791
6	220004	Accrued Vacation Payable	(7,124)	94.47%	(8,728)
7	225105	A/P - Inventory	(5,840)	94.50%	(5,519)
8	225151	Unclaimed Customer Credits & Checks	(937,479)	87.21%	(817,619)
9	225500	Payroll Deductions	20,917	94.47%	19,759
10	225507	One Pledge Club Atlanta	(6,304)	94.46%	(5,955)
11	225512	Employee Stock Purchase Plan	(28,419)	94.45%	(24,951)
12	225521	P.A.C Payable	(24)	94.46%	(22)
13	225522	H.E.A.T Payments	(6,757)	100.00%	(6,767)
14	225526	Employee Court Orders	(203)	94.47%	(192)
15	225541	HSA Employee Contributions	(800)	94.43%	(755)
16	225542	Met Life Deduction	(12)	94.43%	(11)
17	225548	AFLAC Supplemental Insurance	(184)	94.43%	(183)
18	225560	Union Dues VNG Local 50	(1,104)	94.46%	(1,043)
19	245600	Escheat - Deposit Balance 2001	(1,500)	87.21%	(1,308)
20	247020	Non-Qualified/Excess Benefit Plan	(73,162)	94.43%	(69,090)
21	247030	Pension Liability/Qualified Plan	(22,575,745)	94.45%	(21,321,807)
22	248800	Other Postretirement Benefits	8,590,676	94.45%	8,113,519
23	258899	Misc/Other Deferred Credits	(181,517)	94.05%	(151,907)
24	277060	Pension Current Liability - Excess	(1,985)	94.45%	(1,875)
25	278500	Reserve for Health Insurance	(64,601)	94.05%	(60,757)
26	202010	Actuarial (gain)/loss	31,891,619	94.45%	30,120,242
27	202012	Reclass actuarial G/(L) to Net	(1,259,146)	94.45%	(1,189,208)
28	202014	Prior Service Costs	(544,433)	94.45%	(514,193)
29	202016	R/C Prior Service Costs to NI	136,088	94.45%	128,528
30		A/P CWIP (2)	(1,248,824)	94.15%	(1,175,770)
31		Reserve for Injuries and Damages (3)	(718,874)	94.05%	(678,195)
32	Total Net Uses/(Sources) of Cash Working Capital		18,706,306.88		17,739,837.28

(1) Utility Capital Payroll Accrued included in Account 225200

(2) Construction Work In Process Accruals not yet paid

(3) Allocated balance from Services Company

Exhibit No: __
Statement VII

Virginia Natural Gas, Inc.
Case No. PUE-2016-00143
Schedule of Rate Year Revenue Requirements
For the Test Year Ended September 30, 2016

Line No.	Description	Amount
<u>Low-Range</u>		
1	Total Adjusted Jurisdictional Rate Base	704,251,472
2	Return on Rate Base (Return on Common Equity of 8.25%)	6.25%
3	Total Net Requirement	44,035,088
4	Less: Adjusted Operating Income	38,233,817
5	Adjusted Operating Income Shortfall/(Excess)	5,801,271
6	Revenue Conversion Factor	60.79%
7	Additional Revenue Required	9,543,281
<u>Mid-Range</u>		
8	Total Adjusted Jurisdictional Rate Base	704,251,472
9	Return on Rate Base (Return on Common Equity of 8.75%)	6.50%
10	Total Net Requirement	45,749,533
11	Less: Adjusted Operating Income	38,233,817
12	Adjusted Operating Income Shortfall/(Excess)	7,515,715
13	Revenue Conversion Factor	60.79%
14	Additional Revenue Required	12,363,598
<u>High-Range</u>		
15	Total Adjusted Jurisdictional Rate Base	704,251,472
16	Return on Rate Base (Return on Common Equity of 9.25%)	6.74%
17	Total Net Requirement	47,463,977
18	Less: Adjusted Operating Income	38,233,817
19	Adjusted Operating Income Shortfall/(Excess)	9,230,160
20	Revenue Conversion Factor	60.79%
21	Additional Revenue Required	15,183,916

Exhibit No: __
Statement VIII

Virginia Natural Gas, Inc.
Case No. PUE-2016-00143
Reconciliation Between Company and Staff Incremental Revenue Requirements
For the Test Year Ended September 30, 2016

Line No.	Description	Amount
1	Company Proposed Incremental Revenue Requirement Increase	\$30,702,015
	<u>Capital Structure and Cost of Capital:</u>	
2	Staff's Proposed Capital Structure	96,502
3	Staff's Proposed Return on Equity	(8,460,953)
4	Operating Revenues	2,185,234
	<u>Operating Revenue Deductions:</u>	
5	VNG Employee Labor and Benefits	(230,719)
6	Service Company O&M Charges	(465,206)
7	Rate Case Expense	(165,191)
8	Other O&M Expense	(5,319,605)
9	Depreciation and Amortization (including AGSC allocation)	(1,917,652)
10	Taxes Other than Income Taxes (including AGSC allocation)	(682,137)
11	Income Tax Expense Correction	5,603
	<u>Rate Base:</u>	
12	Cash Working Capital Allowance - Lead/Lag Study	(560,909)
13	Other Cash Working Capital Items	13,727
14	Utility Plant in Service	(5,484,678)
15	Construction Work in Progress	(200,995)
16	Accumulated Depreciation	553,692
17	Other Rate Base Deductions	2,294,796
18	Other Miscellaneous Differences	<u>76</u>
19	Staff Proposed Incremental Revenue Requirement Increase	<u><u>\$12,363,598</u></u>